

# EXHIBIT 3



IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION

NETLIST, INC., ( CAUSE NO. 2:22-CV-203-JRG  
)  
Plaintiff, ( )  
vs. ( )  
MICRON TECHNOLOGY, INC., ( )  
et al., ( ) MARSHALL, TEXAS  
( JULY 26, 2023  
Defendants. ) 9:00 A.M.

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MARKMAN HEARING

BEFORE THE HONORABLE ROY S. PAYNE  
UNITED STATES MAGISTRATE JUDGE

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1 THE COURT: Good morning. Please be seated.

2 For the record, we're here for the claim construction  
3 hearing in Netlist versus Micron Technology, et al., which is  
4 Case No. 2:22-203 on our docket.

5 Would counsel state their appearances for the record?

6 MR. BAXTER: Good morning, Your Honor. Sam Baxter  
7 with McKool Smith, Jason Sheasby, Michael Tezyan, and Ms.  
8 Yanan Zhao. We are here for the Plaintiff, and we're ready,  
9 Your Honor.

10 THE COURT: All right. Thank you, Mr. Baxter.

11 MR. HILL: Good morning, Your Honor. Wesley Hill,  
12 Mike Rueckheim, William Logan, and our client representative  
13 Becky Carrizosa also here for Micron. And we're ready to  
14 proceed.

15 THE COURT: Thank you, Mr. Hill.

16 I'll also note for the record that earlier this morning  
17 we distributed to counsel for both sides a set of preliminary  
18 constructions of most of the disputed terms. I do want to  
19 emphasize that the purpose of issuing those preliminary  
20 constructions is not to prevent either side from arguing  
21 whatever constructions they deem are appropriate; rather, the  
22 intent of the preliminaries is to allow counsel to focus their  
23 time and attention where they think the Court may have most  
24 gone astray. I do reserve the right to amend these  
25 constructions, and not uncommonly do alter them based on the

1 arguments received at this hearing. So I hope they'll be  
2 taken in that spirit.

3 You will note that for what we've identified on the  
4 preliminary as the F or 'drive' terms, that there is no  
5 preliminary construction, and I'll just go ahead and say that  
6 the reason for that is that the arguments on that term were  
7 getting into construing the prior court's construction, and I  
8 am never comfortable focused entirely on construing a past  
9 construction. I would rather hear the arguments that are  
10 based on the claims, the spec, and the prosecution history,  
11 and not on what the meaning of the court's prior construction  
12 might be applied to different issues.

13 So having said all that, I'll turn it over first to  
14 counsel for Plaintiff.

15 MR. SHEASBY: May it please the Court. Jason  
16 Sheasby for the Plaintiff, Your Honor.

17 We've conferred with honorable opposing counsel and an  
18 agreement was reached, subject to the Court's preference,  
19 that we are only going to be arguing the following terms in  
20 the tentatives: A, B, D --

21 THE COURT: Did you say D or --

22 MR. SHEASBY: D as in dog, E as in Eric, F as in  
23 Frog, and M as in Mary. And for the party that is seeking to  
24 alter the preliminary construction, I felt it would be  
25 appropriate for that party to go first, subject again to your

1 permission. And so with that, I'll ask counsel for Defendant  
2 if they want to argue the first term.

3 THE COURT: That works for me. Thank you.

4 MR. SHEASBY: Thank you, Your Honor.

5 Yes, sir. Mr. Rueckheim.

6 MR. RUECKHEIM: Hello, Your Honor. Mike Rueckheim  
7 for Micron.

8 May it please the Court.

9 The first term we're discussing today is the 'electrical  
10 communication' term. This term appears in the '060 Patent and  
11 the '160 Patent independent claims.

12 The claim language refers to electrical communication  
13 with a first group and a second group of array dies. The  
14 claim -- Netlist has proposed a construction that argues  
15 there's some kind of dispute between the parties with respect  
16 to the terms 'electrical connection' and 'electrical  
17 communication', and in the briefing we've out line electric --  
18 'connection' is actually not a term in the claims, and there  
19 needs to be no distinguishment between that term because it's  
20 not a claim language. And there's no dispute between the  
21 parties as to the difference between 'electrical  
22 communication' and 'electrical connection', no actual dispute  
23 that's been presented in the briefing.

24 THE COURT: And let me just point out,  
25 Mr. Rueckheim, that the items that are within brackets as

1 notes are not part of the construction that would be given to  
2 the jury; that the intent of having notes is just to advise  
3 the parties that whatever is in the note will be in the claim  
4 construction order, in case that matters, so that it can be  
5 argued. But if a concern is that there's no need to tell the  
6 jury that, the jury won't be told what's in that note.

7 MR. RUECKHEIM: Thank you, Your Honor. That is  
8 helpful.

9 THE COURT: All right.

10 MR. RUECKHEIM: With that in mind, and I'll just  
11 finish that thought that we -- Micron's position is there is  
12 really need even for a note because there's no dispute between  
13 'electrical connection' and 'electrical communication'. These  
14 are commonly understood terms. You can obviously have a wire  
15 connecting two pieces of metal--there's your connection. If  
16 there's no power applied, you're not going to have electrical  
17 being communicated across the wire. This is a very easy  
18 concept.

19 What is harder, though, is there is a dispute as to  
20 whether the term 'electrical communication' requires something  
21 more. So this is the actual dispute that's between the  
22 parties that we have an *02 Micro* problem for the Court. And  
23 we know there's a dispute because Netlist in the prior case  
24 argued to the jury that this term 'electrical communication'  
25 requires something more; requires a hook-up to a data port.

1 And as we just discussed, the claim language doesn't use the  
2 term 'data port'; it just says there's an electrical  
3 communication to an array die.

4 THE COURT: You know, maybe I need to hear from the  
5 Plaintiff, then, because their briefing did not indicate the  
6 relationship that you're talking about, and I was not certain  
7 that in the argument that counsel for Plaintiff made in the  
8 last case that they were, in fact, saying that it is a  
9 limitation of the claim as opposed to an indication that the  
10 claim has been met.

11 Do you understand from your conversations with  
12 Plaintiff's counsel that they are contending that, in fact,  
13 the claim requires data ports as a limitation?

14 MR. RUECKHEIM: Not from conversations with opposing  
15 counsel, Your Honor. I sat in and watched the tail end of the  
16 *Netlist v. Samsung* trial, and so from observing what was  
17 argued there, that's where I understand that they were arguing  
18 to the jury what's shown here on the screen, and then also,  
19 Your Honor, in briefing in this case, Plaintiff has argued  
20 that 'electrical communication' requires even something more.  
21 There is an argument in the briefing that 'electrical  
22 communication' requires responsiveness. It says, "The above  
23 clear makes -- the above quotes"--they're citing to the  
24 specification, the intrinsic record here--it says that the  
25 electrical communication requires some kind of responsiveness.



1 So this is their interpretation of what the term means.

2 They say that the electrical communication requires  
3 communication to a memory circuit of an array die, and you  
4 know that's wrong because the claim just says 'array die'.  
5 Once you start putting specific components on there, like a  
6 data port or memory circuit, then you're going outside --  
7 you're rewriting the claims, as we've shown here in red, and  
8 that's improper and there's no support in doing that.

9 There's also this dispute as to whether 'electrical  
10 communication' can be to a stub on the array die. And as we  
11 pointed out, there is really only one paragraph that Netlist  
12 is relying upon for the stub argument, and this paragraph is  
13 shown on the slide 12. The paragraph starts with the  
14 explanation that you have these die -- imagine like flat  
15 planes that have interconnects, these TSVs, and there's no  
16 electrical communication when you have these TSV  
17 wires--however you want to think about them--in air or in some  
18 kind of insulator. Of course there's not going to be  
19 electrical communication to the array die. And the paragraph  
20 discusses how you have to have sufficient size, so there's no  
21 electrical communication.

22 And the only reference to the stubs are at the very  
23 bottom of this paragraph, which is about wires being in air,  
24 and it says these wires may have electrical communications  
25 coming off of them into the air, and maybe they don't have

1 wires coming off of them or maybe they're just stubs, but  
2 regardless, when there's no connection to an array die, you  
3 don't have electrical communication. That doesn't require --  
4 that doesn't require changing the claim language to refer to  
5 electrical communications being anything more than to an array  
6 die.

7 And with that clarification, Your Honor, if there is no  
8 dispute between the parties, we would request, maybe as Your  
9 Honor has done with the note that's already in the tentative  
10 construction, that 'electrical communication' does not require  
11 communication to a data port, memory cells, responsiveness, or  
12 really anything to do with the stub.

13 THE COURT: Well, what 'electrical communication'  
14 does require is going to be set out by the particular claim,  
15 the particular limitation that uses it. And are you  
16 contending that the term in and of itself requires connection  
17 with a particular device?

18 MR. RUECKHEIM: The claim itself says you have  
19 electrical communication with a group of array dies, and  
20 that's exactly what we think the claim means. We don't think  
21 the claim should be limited, as Netlist has argued, to any  
22 specific component on the array die.

23 THE COURT: All right.

24 MR. RUECKHEIM: And with that, Your Honor, I can  
25 turn the arguments over to counsel for Netlist.

1 THE COURT: All right. I'll give you a chance to  
2 respond after Plaintiff's counsel.

3 MR. SHEASBY: Jason Sheasby for Plaintiff, Your  
4 Honor.

5 There are two patents in the family at issue, and I don't  
6 think it was intentional, but there was I think some  
7 imprecision in the argument, which is that one of the patents  
8 in the family, the '060, actually requires each array die to  
9 have data ports. And so there is a data port limitation in  
10 each of the claims.

11 Now, the more trenchant question is what does it mean to  
12 satisfy an electrical communication, to have an electrical  
13 communication. It is, in fact, correct that we took for the  
14 purpose of proving infringement in our case that connection to  
15 the data port in the Samsung design was the *sine qua non*. It  
16 proved that there was electrical communication, its presence  
17 or absence. But obviously the claim doesn't recite either the  
18 presence or absence of a data port or responsiveness in that  
19 third limitation, and whether it's theoretically possible to  
20 have a connection -- electrical communication in a design in  
21 which a data port is not present is really a question for an  
22 expert; it's not a question for claim construction.

23 In the specification it repeatedly indicates that the way  
24 that electrical communication is achieved is by having a  
25 connection to a data port. And so in the blue which

1 corresponds on -- this is at column 8, lines 35 through 62.  
2 In the blue there's no data port connection and there's no  
3 electrical connection, and then in the red there is a data  
4 port connection and there is electrical communication. Excuse  
5 me. I said connection, but I meant communication.

6 This is not the only example. If you go to the '060  
7 Patent, to 5:41 through 45, it also makes clear that it's  
8 the connection to data ports that achieves the electrical  
9 communication.

10 Same at '060, 8:19 through 34. Once again, the data  
11 ports are the -- what -- evidence that there's electrical  
12 communication is occurring.

13 And again, the abstract itself makes clear that's the  
14 ability to interface with a data port that allows for  
15 electrical communication.

16 Again, '060 at column 2, lines 23 through 35, makes  
17 clear -- column 2, lines 20 through 35, that the electrical  
18 communication is achieved because it's able to connect with a  
19 data port.

20 So I don't think -- what they're I think asking the Court  
21 to do is, in effect, render an expert opinion that you can  
22 have an electrical communication without being able to connect  
23 to a data port or without being able to be responsive to the  
24 signal that's on -- that's being traveled -- that's traveling  
25 through the interconnect. And our point is that that's an

1 expert determination.

2 We're not asking for the Court to construe 'electrical  
3 communication' as requiring a data port, nor are we asking the  
4 Court to construe 'electrical communication' as not requiring  
5 a data port. The question about whether something is able to  
6 achieve electrical communication without the presence of a  
7 data port would be for an expert to determine.

8 THE COURT: And just so I'll understand, are you  
9 contending that there's anything not reflected in the claims  
10 themselves that dictates what an electrical communication is  
11 within the context of that claim?

12 MR. SHEASBY: No.

13 THE COURT: All right. That was my understanding.  
14 And so other than the import of the surrounding claim  
15 language, there's no contention by the Plaintiff that  
16 'electrical communication' requires connection with a data  
17 port.

18 MR. SHEASBY: Well, the claim doesn't require it.  
19 Whether it's technically possible for electrical communication  
20 to occur without connection to a data port, we don't believe  
21 it's technically possible in the designs that are accused of  
22 infringement. But that's a technical question, if that  
23 distinction makes sense.

24 In other words, this is not a situation where we say  
25 there's a disclaimer and you have to import the phrase

1 'connected to a data port' into the element as a matter of  
2 clear and unequivocal disclaimer, but I want to be up-front  
3 with the Court, which is from a scientific matter, we don't  
4 believe that it's possible to achieve electrical communication  
5 in the designs that are accused of infringement without  
6 connecting to a data port.

7 THE COURT: All right. I think I understand that  
8 position, Mr. Sheasby. Thank you.

9 MR. RUECKHEIM: Your Honor, Mike Rueckheim again.

10 Just briefly in response, Plaintiff has said that they're  
11 not seeking to construe the claim, yet they got up here and  
12 talked about embodiments from the specification in different  
13 areas. And so our concern is that Plaintiff is saying they're  
14 not to construe the claim, but they're going to get up and  
15 tell the jury that 'electrical communication' requires  
16 communication with a data port, or as they argued in their  
17 briefing, with memory cells or some type of responsiveness.  
18 And this is not just having experts decide and it's not asking  
19 the Court to decide claim construction--sorry--provide an  
20 expert opinion; this is what they're saying the meaning of  
21 the term is, and they're pointing to it with the intrinsic  
22 record.

23 THE COURT: Well, if their expert opines that the  
24 reason that 'electrical communication', as used in this claim,  
25 requires connection with a data port is because of what the

1 spec says and not because of the science, then there is a  
2 claim construction issue that I expect will be raised. But  
3 if, as Mr. Sheasby represented, the expert is just testifying  
4 that in the context of whatever the accused device is,  
5 'electrical communication', as it's known in the art, requires  
6 this or that, then I don't think that's a claim construction  
7 issue.

8 MR. RUECKHEIM: I would take issue slightly with 'as  
9 it's known in the art', which sounds to me, again, like you're  
10 saying that one of skill would understand the term 'electrical  
11 communication' in a certain way, and we -- Micron disagree.  
12 We don't think the term requires communication with a data  
13 port. And the claim just says 'with an array die'.

14 Mr. Sheasby pointed out the '060 Patent also recites  
15 'data ports', but the claim recites 'communication with an  
16 array die'. That it recites 'data port' separately proves our  
17 point. That's a component on an array die, but that's not the  
18 component that the claim recites 'electrical communication'  
19 to.

20 THE COURT: Well, I am thinking at this point  
21 that that's an issue that's going to have to await further  
22 development to see, in fact, what the experts say about it.  
23 But if you believe that the expert is -- the Plaintiff's  
24 expert is engaging in claim construction, then that's  
25 something I expect we'll hear about in motion practice, but

1     what I'm hearing right now from the Plaintiff is that that's  
2     not what their expert will say, and I -- it's appears to me  
3     that 'electrical communication' is being used in these claims  
4     in accordance with its ordinary understanding in the art.

5             MR. RUECKHEIM: Understood, Your Honor.

6             THE COURT: All right. Thank you, Mr. Rueckheim.

7             MR. TEZYAN: Good morning, Your Honor. Michael  
8     Tezyan for Netlist.

9             THE COURT: Good morning.

10            MR. TEZYAN: I'd just like to touch on the 'driver  
11     size' term briefly. And I understand that Your Honor has  
12     construed 'driver size' to mean 'driver physical size', and  
13     just the clarification question that we have is does Your  
14     Honor intend to give more guidance as to what 'physical size'  
15     means, or will that be for the experts?

16            THE COURT: Tell me what you think the issues are  
17     that you're seeking further guidance on.

18            MR. TEZYAN: Slide 29, please.

19            THE COURT: I mean, the intent of the construction  
20     was to distinguish size as referring to the physical size, not  
21     the strength, not the capacity, that sort of thing. But as to  
22     how you determine physical size, I don't know that that's  
23     something that I'm in a position to give guidance on, but if  
24     you present an issue, I'll certainly try.

25            MR. TEZYAN: May I confer with Mr. Sheasby for one



1 moment?

2 THE COURT: All right.

3 MR. TEZYAN: Thank you.

4 (Pause in proceedings.)

5 MR. TEZYAN: Thank you, Your Honor. With that  
6 clarification, I don't think we need to argue this term  
7 further.

8 THE COURT: All right. Is there any argument from  
9 the Defendant?

10 MR. RUECKHEIM: No argument on this term, Your  
11 Honor.

12 THE COURT: All right. Thank you.

13 MR. RUECKHEIM: I believe I am up first for the next  
14 couple of terms, Your Honor. And for terms D and E, I'll  
15 start with D, of course.

16 For both these terms, we really also have just a point of  
17 clarification. For term D, 'one or more previous operations',  
18 the dispute really is that Netlist in IPR papers for a related  
19 patent argued the term 'leveling', 'write leveling' is not a  
20 memory operation. And we, Micron, actually won on that issue.  
21 The PTAB agreed with us that 'leveling' is a memory operation.

22 And to the extent Your Honor found that that win is  
23 dispositive or relevant to Your Honor's construction, I just  
24 wanted to point out that that win is -- we have no indication  
25 whether Netlist is going to appeal that issue and if they're

1 going to continue arguing to the appellate court that  
2 'leveling' is a memory operation -- or is not a memory  
3 operation--sorry. And so with that, that's the only point of  
4 clarification for that term, Your Honor.

5 THE COURT: You know, it's my understanding that  
6 there's no final decision yet in the IPR.

7 MR. RUECKHEIM: There is a final written decision  
8 for the '035 Patent--that's the related patent--where really  
9 this argument as to whether -- netlist argued that 'leveling'  
10 is not a memory operation. But they're still within the  
11 appeal window to file a notice of appeal, so I don't know if  
12 they're going to contest that or not, Your Honor.

13 THE COURT: All right. Well that -- it is my  
14 impression that the -- whether or not that has a disclaimer  
15 effect will depend on whether it becomes final or not.

16 MR. RUECKHEIM: I understand, Your Honor.

17 THE COURT: All right. Does the Plaintiff have any  
18 update on the issue of finality?

19 MR. TEZYAN: No, Your Honor; not at this time.

20 THE COURT: So meaning that you're still within the  
21 appeal window. Is that right?

22 MR. TEZYAN: I believe so, but I would have to check  
23 to make sure.

24 THE COURT: All right. Thank you.

25 MR. TEZYAN: Thank you.

1 MR. RUECKHEIM: Your Honor, with that I'll turn to  
2 the next term which we've noted in the preliminary  
3 construction as E. It's the 'determining' term for the '506  
4 Patent. And for this one also just a point of clarification.

5 Your Honor dealt with this term -- construed this term in  
6 the *Netlist v. Samsung* litigation. There Samsung pointed to  
7 the intrinsic record -- statements made in the intrinsic  
8 record and statements made in the prosecution history that it  
9 urged -- supported the same construction that Micron is  
10 offering now.

11 I just wanted to make sure that we were clear, at least  
12 in our briefing, that we pointed to statements that Netlist  
13 made in IPR after Your Honor's construction; in fact, a month  
14 after where Netlist also argued that this claim 14 that does  
15 not explicitly recite 'during one or more previous memory  
16 operations', implicitly required it and made the same  
17 arguments for claim 1 and claim 14. And we cited to that IPR  
18 briefing, we've included as exhibits to our response. But  
19 with that point of clarification, that's all we had.

20 THE COURT: All right. Thank you.

21 MR. TEZYAN: And nothing further from Plaintiff on  
22 this term, Your Honor.

23 THE COURT: All right, then. Thank you.

24 MR. RUECKHEIM: Your Honor, Mike Rueckheim again.  
25 Turning to term F in the preliminary construction, the

1 'drive' term from the '339 Patent.

2 So Netlist's reply brief probably states it the best that  
3 they are not trying to relitigate the Court's prior  
4 construction that this 'drive' term refers to enabling one of  
5 the data paths while the other possible paths are disabled.  
6 In the Samsung litigation there was a dispute between Netlist  
7 and Samsung. Samsung pointed to prosecution history that  
8 stated that Netlist's invention was this fork in the road  
9 approach that required enabling one data path while others are  
10 disabled, and Your Honor's construction of this term also said  
11 that you're adopting the fork in the road approach.

12 The primary issue--and I'll skip ahead--again--and this  
13 is from observing the *Netlist v. Samsung* trial--is that Your  
14 Honor's construction of this 'drive' term doesn't include the  
15 surrounding language in the 'drive' term, and that language  
16 refers to -- this is the claim term on the left. It said you  
17 are actively driving a respective byte-wise section--that's in  
18 blue--of the N-bit wide write data path, and that's in red.

19 And so what happened during the Samsung trial is that  
20 Netlist argued that the data paths that they're pointing to  
21 for claim 1 don't have to be write data paths. And this is on  
22 the screen. This is I believe counsel's closing argument.  
23 And he said that, you know, "Opposing counsel here--that was  
24 Samsung's counsel--"said it had to be a write data path."  
25 Right? Well, that's what the claim says. "But opposing

1 counsel said you're going to get the Court's claim  
2 construction in your binder"--and we've bolded this--"and if  
3 anyone tells you the data path has to be only a write data  
4 path, point them to Judge Gilstrap's construction of the term  
5 'drive'."

6 "Look at" -- and this is on the bottom of the slide here.  
7 It said, "Look at the term" -- "Look at the claim  
8 construction"--this is Judge Gilstrap's claim  
9 construction--"for the term 'drive' and see if it mentions the  
10 word 'not read', because there they're pointing to a write  
11 data path and a read data path as satisfying this  
12 construction.

13 And you don't have to look at the construction; you look  
14 at the claim. The claim says write data path. I don't  
15 believe Your Honor's construction was meant to change that  
16 aspect of the claim, and I don't believe Your Honor's prior  
17 construction was meant to change the aspect of the claim that  
18 says 'byte-wise'. And Netlist in the Samsung litigation  
19 couldn't point to a byte-wise data path; they pointed to a  
20 nibble, two nibbles--that's two four-bit paths as opposed to a  
21 byte being eight bits.

22 And they said the claim construction here -- well, they  
23 said -- this is the expert. He said, The expert pointed out  
24 because buffers have an upper nibble and a lower nibble, there  
25 are two paths. This is two -- path one and path two, an upper

1 half byte and a lower half byte. But the claim itself says,  
2 the respective byte-wise section. This is an eight-bit  
3 section, not two four-bit sections. And I don't believe Your  
4 Honor's construction was meant to change that aspect of the  
5 construction either.

6 And so what Micron has tried to do is not change Your  
7 Honor's construction, but we've tried to insert Your Honor's  
8 construction into the actual claim so that when the jury reads  
9 it, it would make sense to them. And here the claim has the  
10 word -- Your Honor's construction on the -- where it says  
11 'Micron's proposed construction' in bold 'enable one -- only  
12 of the data path', that's from Your Honor's construction. The  
13 part -- the 'respective byte-wise section', that's from the  
14 claim language verbatim; the 'N-bit wide write data path',  
15 that's the claim language; 'while other possible paths for the  
16 same byte-wise section of N-bit write data are disabled'.

17 And so we've tried to capture the full meaning of the  
18 claim so there's no confusion by the jury, just based on Your  
19 Honor's shorthand maybe construction of the term 'drive', and  
20 we've put it back into the claim.

21 So in briefing Netlist has pointed to--and I expect  
22 they're going to point to it again today--a number of  
23 embodiments and figures in the '339 specification and argued  
24 that these embodiments and figures disclose a single path  
25 embodiment that would not be encompassed by Micron's proposal,

1 which just gives, you know, meaning to the claim, the actual  
2 claim language itself. It just recites the claim language.

3 So there's two problems with that. The first is the  
4 claims don't have to cover every embodiment, of course.  
5 That's why you have multiple claims. And so, you know, it  
6 doesn't matter that there is some embodiments that have a  
7 single path versus a fork in the road path.

8 And problem number two is even worse, is that Netlist has  
9 already lost this argument. Netlist -- and we've pointed in  
10 our briefing, because they made the same single path argument  
11 in the Samsung litigation before Your Honor, they lost, they  
12 had a chance to submit objections, they did submit objections,  
13 and then they withdrew those objections. The fork in the road  
14 versus single path argument is closed.

15 Thank you, Your Honor.

16 MR. SHEASBY: Mr. Tezyan, could I have the remote  
17 control, please?

18 I want to start and approach this from a different way  
19 because I think that there's always a danger when I try to be  
20 a mind reader and sort of read what the Court had in mind  
21 during the Samsung claim construction hearing.

22 So this is the claim, and the claim talks about 'actively  
23 driving a respective byte-wise section of the N-bit wide write  
24 data'. And there are I think three disputes. The first  
25 dispute is that what does the 'actively driving a byte-wise

1 section of the N-bit wide path' means. And you'll notice that  
2 there was a play of words in which counsel said everyone knows  
3 'byte-wise' means eight bits. And the reason why he was  
4 saying that is because that's actually a point of heavy  
5 dispute.

6 If you go to slide -- oh, I'll go to slide 62.

7 The byte-wise embodiment is an embodiment in which you  
8 have the write data and the write data will be split into two  
9 chunks. Those are byte-wise chunks. The abstract of the '339  
10 Patent speaks about the fact that there are byte-wise sections  
11 of write data which inherently and necessarily means that it's  
12 only a portion of the write data in each byte-wise section.

13 And if you go to column 13:54, to 14, line 15, you can  
14 see an example of this. The write data is the eight-bit data  
15 that's coming in, which was what my brother referred to, but  
16 the byte-wise embodiment actually splits that eight into two  
17 four-bit paths, creating the fork in the road and the two  
18 paths embodiments that we spoke about. And, in fact, in --  
19 exactly consistent with the arguments that were made in the  
20 prosecution history, it talks about the ability to selectively  
21 transmit a byte-wise section of that eight-bit data on one  
22 path or the other. So this is column 13:54, through 14, lines  
23 4, and figure 4B.

24 And so there's no dispute that there's a path there.  
25 It's a path involving two write paths, and it splits up the



1 write data between those two write paths. The two -- the  
2 upper and lower nibble are independently able to receive the  
3 portions of the data.

4 And so the first issue with the claim construction is  
5 that to the extent the claim construction that they're  
6 advancing is going to exclude the embodiment in which the two  
7 paths are carrying a subpart of the write data, which is what  
8 their language does, their proposed sort of insertion of the  
9 Court's claim construction language into the specification,  
10 that would be exactly contrary to the embodiments.

11 The second issue --

12 And if I can have the elmo, Madam Courtroom Deputy.

13 The second issue is in an embodiment in which the write  
14 paths -- in which the two paths are not a write and read path  
15 but, in fact -- sorry. Two write paths, can they be two -- a  
16 write path and a read path. And there's no doubt that the  
17 claim is requiring -- there's no doubt that the claim is  
18 requiring that the path that's turned on is a path that's  
19 sending write data, which the claim language expressly says.

20 But the issue is to achieve the benefit of the patent,  
21 which the fork in the road embodiment does, which is that it's  
22 able to shut off multiple paths while only allowing one path  
23 to be active at a time, the reason why it does that is because  
24 that decreases the load that's perceived by the memory  
25 controller.

1           And if you look at the specification--and this is column  
2   14, lines 59 through 60--it talks about this -- begins to talk  
3   about this concept of the benefit of hiding the number of  
4   memory devices that are hanging on a buffer, and they're  
5   hanging on the memory controller, is by shutting off the other  
6   paths that go to that device. And to speak in the language of  
7   the claim as precisely as possible, the tri-state buffers  
8   within the circuitry can turn on and off different paths that  
9   are connected to the circuitry in order to decrease the load  
10   that's perceived.

11           And there's nothing in the specification -- as we note in  
12   our argument, there's nothing in the claim itself and in the  
13   prosecution history that precludes that the way you are  
14   shutting off and decreasing the load is to shut off the write  
15   path that's hanging off that data buffer so that the only  
16   thing that's active at any one time is the read path.

17           And, in fact, I'll point down to column 15, lines 59  
18   through 60. The specification expressly contemplates that the  
19   two or more data paths, one of which is going to be shut off,  
20   could be the read data path. So in an embodiment in which  
21   you're meeting the claim terms by driving the write data on  
22   one path while closing off the other paths, the other paths  
23   that are closed off can quite definitively be a read path.

24           The prosecution -- and there is a sort of meta argument,  
25   because counsel for Micron relied on the disclaimer that was

1 discussed in the Samsung briefing, but did not re-present the  
2 disclaimer briefing in this proceeding. The disclaimer  
3 briefing, which the Court discusses in its previous claim  
4 construction order, disclaimer briefing -- let me be more  
5 precise. The disclaimer arguments from the prosecution  
6 history, the disclaimer arguments from the prosecution history  
7 talk about shutting off other potential data paths to decrease  
8 the load, but there's nothing that require that the other data  
9 paths that are shut off be write data paths as opposed to read  
10 data paths. And in the portion of the specification which I  
11 just pointed out to Your Honor, the '339 Patent treats 'read'  
12 and 'write' as both data paths that can be toggled on or off.  
13 And so there's nothing in the specification on the record that  
14 suggests keeping the read path active while shutting off all  
15 the other available road paths doesn't achieve this benefit of  
16 decreasing load.

17 Now, there's a third issue, and the third issue --

18 If I could have the slides.

19 The specification talks about embodiments in which there  
20 are less than four ranks, and, in particular, it talks about  
21 embodiments in which there are two ranks. In a two-rank  
22 embodiment, the -- sorry. So the record is clear, the  
23 two-rank embodiment is discussed at column 9, lines 44 through  
24 52. The two-rank embodiment has the same challenges as the  
25 four-rank embodiment in which there is an increased load

1     that's seen by the memory controller. And in that embodiment,  
2     if you're going to argue the write paths, there have to be two  
3     write paths, one of which -- both of which exist and only one  
4     of which is turned on.

5             If you're using the two-rank embodiment without the upper  
6     and lower nibble, there would not be two write paths; there  
7     would only be one write path. So you're still only driving on  
8     one write path, there's only one possible write path. There's  
9     also a read path such that there would be a fork in the road,  
10    but the problem with their construction is by requiring the  
11    presence of two independent write paths, it excludes the  
12    embodiment in which you don't use the byte-wise splitting of  
13    the write data into two paths, and you only have two ranks.

14            So we accept the Court's construction from Samsung, but  
15    we take issue with the sort of meta construction that's  
16    occurring, and we do that for three reasons. One, the  
17    byte-wise buffers that are recited in the claim clearly  
18    contemplate a situation in which there is an upper and lower  
19    nibble of the write data such that byte-wise is not eight  
20    bits, which is what they're implicitly trying to get the Court  
21    to accept, and excludes an embodiment in which the two paths  
22    are the upper and lower nibble going on separate data paths.  
23    That's 13:54, through 14:14.

24            The second thing that we reject, if you go to column 15,  
25    lines 58 through 60, the two data paths are clearly

1 potentially write and read paths, and shutting off the read  
2 paths decreases the load that's perceived by the memory  
3 controller, vindicating the purpose of the invention. And  
4 there's nothing in the prosecution history that disclaims one  
5 of the data paths that is shut off as being the read path.

6 And the third challenge we have is that their  
7 construction in the situation in which you don't use a  
8 byte-wise controller and which you send all eight bits on the  
9 write path, they are excluding the instances in which there's  
10 only two ranks.

11 And if we could have the slides.

12 The two-rank embodiment is discussed at column 9, lines  
13 44 through 52.

14 If we can go back to the slides, Ms. Andrews.

15 THE COURT: Mr. Sheasby, what you're arguing about a  
16 read path being read as one of the paths that is enabled or  
17 disabled, my question is, is that embodiment, which you  
18 pointed out is contemplated at the bottom of column 15, is  
19 that embodiment included within the scope of claim 1?

20 MR. SHEASBY: So I think that the best answer I can  
21 give to that is by working backwards with the portions of the  
22 specification that Your Honor points to as the basis for the  
23 discussion of 'drive'.

24 So column 15, lines 59 through 61, talks about write and  
25 read paths as both being data paths, and then literally in the

1 very next column it talks about how you can toggle the data  
2 paths, keep one data path off and turn one data path on in  
3 order to achieve the driving of data to only a subset of the  
4 memory devices that are hanging off the buffer.

5 THE COURT: And where in column 16 is that?

6 MR. SHEASBY: I believe, Your Honor -- and give me  
7 one moment. I am going to toggle between two documents. If  
8 Your Honor will give me just one second, I'll find it.

9 Your Honor pointed to 16, line 7 through 25 in the  
10 Samsung claim construction order as the basis for the  
11 specification support for 'drive' -- for the 'drive'  
12 construction. And the specification -- and in that passage it  
13 talks about data transmission circuits, and it talks about  
14 path A or path B to direct the data, but it never talks about  
15 that the path A or path B -- both the path A and path B must  
16 be a pass solely for write data or solely for read data.

17 And so as a matter of propinquity, the discussion of the  
18 fact that the data paths can read and write that occurs at  
19 column 15, lines 59 through 60, is introducing the technique  
20 that was the basis for the drive construction at column 16.

21 So as a scientific matter, you would have to say that  
22 keeping the write path open, turning off the read path, does  
23 not decrease load because the purpose of this entire exercise  
24 is introduced at column 14, lines 59 through 60. In that  
25 passage, it's describing the idea that you want the controller

1 to see as few active devices as it possibly can. And the way  
2 it sees as few active devices as it possibly can is by  
3 shutting off all unused data paths. And so the argument would  
4 have to be that shutting off the read data path, keeping the  
5 write data path open, does not achieve that load reduction  
6 functionality.

7 And I believe that the specification makes clear that  
8 it's not -- it's agnostic as to what those data paths are.  
9 And I don't think there's anything in the prosecution history  
10 that discloses the data path that is shut off from being a  
11 read data path while the write data path remains on, load is  
12 decreased, and the purpose of the invention is achieved.

13 THE COURT: You know, it was my impression as I  
14 recall the prior litigation, the Samsung litigation, that we  
15 were construing the 'drive' terms in the scenario really shown  
16 in figure 5 where you have the A and B paths, both of which  
17 are write paths, and the determination in that case was that  
18 driving in that scenario would require that only one of those  
19 paths be enabled.

20 MR. SHEASBY: So I agree that figure 5 is two write  
21 paths that are being depicted as opposed to a write and read  
22 path, Your Honor. The question is, is the claim limited to  
23 that in which the figure 5 and the two paths are just write  
24 paths.

25 So there's three issues. There is the byte-wise issues,

1     which is upper and lower nibble, and upper and lower nibble  
2     are clearly encompassed by figure 5. And you can see that in  
3     the depiction, for example, of figure 4B, which is like figure  
4     5, has a fork in it but is saying the upper and lower nibble.  
5     So if Your Honor is suggesting that figure 5 is the  
6     articulation of the claim, figure 5 would still encompass  
7     upper and lower nibbles.

8             The second issue is this figure 5, which I agree with you  
9     is two write paths, does that limit the situation in which the  
10    other path that is shut off is not a write path as opposed to  
11    a read path, because -- the reason why I say that is because I  
12    believe in figure 5, it depends on if those are reading or  
13    writing. My recollection is that in figure 5, the paths y1  
14    and y2 can be used for both read and write. And the reason  
15    why I say that is because if you look at column 16, lines 26  
16    through 44, Your Honor, it's using the same y1 and y2 for  
17    read. So the way I interpret figure 5 is that in a write  
18    operation, the two paths, y1 and y2, are paths that can send  
19    write data, and in a read operation those same paths can send  
20    read data.

21            Now, the question is would the embodiment in which there  
22    is a dedicated read path and a dedicated write path, y1 and  
23    y2, and you shut off one and keep the other one open, thereby  
24    decreasing the load, was that clear and unequivocally  
25    disclaimed in the prosecution history or in the specification,



1 and I would suggest that the absence of a disclaimer on the  
2 paths being separate read and write paths, dedicated read and  
3 write paths, one and the other, coupled with 15, lines 58  
4 through 60, would not support that narrow interpretation.

5 In other words, based on Your Honor's comment, I have  
6 lost the argument that this claim covers a two-rank device,  
7 and I accept that commentary of what Your Honor had in mind,  
8 two-rank devices discussed at 9:44 through 52. But then you  
9 have to ask yourself the question, one, figure 5 clearly does  
10 encompass an embodiment consistent with figure 4A -- 4B in  
11 which the two paths are only a subset of the data; and then is  
12 -- the second point is do you construe figure 5 to the y1 and  
13 y2 to necessarily be -- to exclude an embodiment in which one  
14 of y1 is a read path and one of y2 is a write path, and then  
15 they shut off one and turn off the other, because they can't  
16 just -- figure 5A can't just be a write path because figure 5A  
17 in column 16 y1 and y2 are used for writing or reading  
18 depending on what mode you're in in that specific embodiment.

19 Your Honor, was that responsive to your question?

20 THE COURT: I think so.

21 MR. SHEASBY: Let me summarize it this way. I find  
22 this to be the hardest of the patents that we've engaged in  
23 the case, and the way I look at it is the following: If you  
24 believe that claim 1 is figure 5, you have to ask yourself two  
25 questions--does that exclude the byte-wise embodiment in which

1 the two paths are a subset of the write data. Clearly there's  
2 nothing in the prosecution history or in the specification  
3 that would exclude that, and, in fact, that would be directly  
4 contrary to column 13, line 54, through 14, line 14, which  
5 uses effectively the same language that Your Honor construed  
6 'drive' as being able to selectively transmit on separate  
7 paths. So that is clearly I think improper.

8 And then the second issue Your Honor has to engage is in  
9 figure 5, if you look at column 16--

10 Thank you, Ms. Andrews.

11 -- y1 and y2 in that embodiment are read or write  
12 depending on what mode it's in. So they're not always write;  
13 they're not always read. So does that exclude -- what do you  
14 do in a situation in which there is a dedicated read path and  
15 a dedicated write data path, and you're shutting off the read  
16 data path, keeping the write data path open, or vice versa,  
17 you are clearly decreasing the load, the specification is  
18 clearly contemplating that a data path can have read, write,  
19 or both, and so is it proper to limit the -- is it proper to  
20 limit the claim to a situation in which the -- the path that  
21 the data is traveling on based on the claim language that's  
22 not shut off is clearly a write data path. The claim language  
23 makes that clear.

24 Is it proper to limit the claims such that the other path  
25 that is turned off must be a write path when, one, that was

1 not the disclaimer; two, the specification contemplates that  
2 data path has a more robust meaning that include both read and  
3 write; three, figure five makes clear that y1 and y2 are not  
4 always and necessarily dedicated read or write paths.

5 And I do think that goes a bit too far in terms of  
6 limiting a claim to the specification. There's nothing in  
7 the specification that excludes an embodiment in which y1 is  
8 write and y2 is read. There's no clear and unequivocal  
9 disclaimer of that, certainly not in the prosecution history.  
10 And certainly the specification at column 15 makes clear that  
11 the data paths can be read or write.

12 At this point I'm just repeating myself, Your Honor, and  
13 your time is valuable and so I'll sit down, unless Your Honor  
14 has any further questions.

15 THE COURT: Well, one thing that I do believe was  
16 clearly decided in the last case is that when there are  
17 multiple write data paths, then enabling -- driving means  
18 enabling only one of the data paths while the other write data  
19 paths are disabled. And I guess I'm -- I have not studied it  
20 from the aspect of a read path in that connection.

21 MR. SHEASBY: And, by the way, although it is  
22 utterly irrelevant what I believe, Netlist accepts and does  
23 not disagree with what you just said in terms of -- that we  
24 believe that prior construction that you just recited it is  
25 correct and consistent with the specification; that when there

1 are multiple write paths, you need to shut off one of them.

2 THE COURT: All right. Thank you, Mr. Sheasby.

3 MR. SHEASBY: That still leaves these two  
4 issues--the byte-wise embodiment, which we think is clearly  
5 contemplated and which the two data paths can be separated  
6 upper and lower nibbles; and two, what happens when you have a  
7 write path and a read path.

8 Thank you, Your Honor.

9 THE COURT: All right. Thank you.

10 MR. RUECKHEIM: Your Honor, Mike Rueckheim again.

11 Counsel just said that there is nothing in the  
12 specification that excludes the data path from being a  
13 combination of a read and write data path. On slide 48 of the  
14 screen we have the claim language. And as Your Honor knows,  
15 the name of the game is the claim, and that there may be other  
16 embodiments in the specification is irrelevant. The claim  
17 here says "a respective byte-wise section of the N-bit wide  
18 write data."

19 And if Your Honor wants further context, you can look at  
20 claim 10. Claim 10 is very similar. For the arguments, the  
21 parties have said claim 1 -- the language from claim 1 here is  
22 representative, but claim 10 says "to actively drive a  
23 respective byte-wise section of the N-bit wide read data."  
24 And so you have claims directed to write data, you have claims  
25 directed to read data, and what counsel for Netlist is doing

1 is asking Your Honor to just erase those words.

2 So the arguments that I'm hearing from Netlist, it's  
3 shifted. The arguments in the briefing have shifted. In the  
4 briefing and in the slides, Netlist has pointed to this figure  
5 4B, the single path embodiment. That was the same exact  
6 argument that they made in the Samsung litigation. Your Honor  
7 pointed them to figure 5, and figure 5 is really not discussed  
8 by Netlist, and there was some discussion of what figure 5  
9 includes by Netlist's counsel.

10 I direct Your Honor to column 15 in the patent around  
11 line 37, and it discusses that the data transmission circuit  
12 may be multiple bits wide, eight bits. And so we're talking  
13 about byte-wise section. And for me, Your Honor, I view what  
14 Netlist is now arguing to the Court is that the Court should  
15 construe this term 'byte-wise' to mean -- it could be  
16 encompassing two four-bit wide paths. And that's a claim  
17 construction dispute. It's changing the plain meaning of  
18 'byte-wise'.

19 I think we'd all agree 'byte' refers to eight bits, and  
20 Netlist is now arguing that byte-wise can be two four bit  
21 pieces of data, and that's a claim construction argument that  
22 they did not raise, and today was the first time that I view  
23 them as raising it.

24 Netlist is also I think making the claim construction  
25 argument for the first time today that 'N-bit wide write data'

1 can refer to N-bit wide read or write data, and that's --  
2 again, that's a claim construction argument that wasn't raised  
3 and it's just not supportable.

4 Counsel for Netlist argued this meta argument--I wasn't  
5 quite sure what they're referring to for meta argument--that  
6 Micron did not discuss the disclaimer. Of course we  
7 incorporate by reference Samsung's briefing on the issue and  
8 we view the issue as closed. The Court has said that I'm  
9 adopting--I'm paraphrasing of course, but--the fork in the  
10 road construction. Netlist argued for the single path,  
11 pointing to 4B, embodiment and the Court said no.

12 And so all that Netlist has done today is talk about 4B  
13 again. They characterize it slightly different, but they've  
14 had their chance at that argument and that issue's closed.  
15 And that's why Micron did not contest or present further  
16 argument on the disclaimer; it's because it's already been  
17 decided.

18 Thank you, Your Honor, with no further questions.

19 THE COURT: All right. Thank you, Mr. Rueckheim.  
20 Mr. Sheasby, anything further on this?

21 MR. SHEASBY: I will just point to three things,  
22 which is --

23 If I could have the slides back, Ms. Andrews.

24 This should not be a it's a his fault it's his fault  
25 sort of argument, which is I think the premise that what a

1 byte-wise section is, I don't think anyone's asking for a  
2 construction of that; what we're asking for is not to be  
3 presumed that the entire eight bits of a byte has to make up  
4 the path, because a byte-wise section is not a byte, it's a  
5 section of the byte, as the abstract speaks about and as the  
6 embodiments at column 13:54, through 14, line 14 speak about.  
7 That's the first issue.

8 The second issue is that no one's suggesting that the  
9 path that the write data goes on must be a write path. The  
10 nub of the dispute is what about embodiments in which the data  
11 path is one write path and one read path. Is there a clear  
12 and equivocal disclaimer of that embodiment in either the  
13 prosecution history or the specification. And the reason why  
14 I phrase it that way is if you look at '339, claim 1, it says  
15 nothing about what is the running on the other data path that  
16 is turned off when the write data is going down the path. So  
17 that would require a clear and unequivocal disclaimer to  
18 indicate that the other path must also be a write path.

19 Thank you, Your Honor.

20 THE COURT: All right. Obviously I will consider  
21 these arguments further.

22 MR. LOGAN: Thank you, Your Honor. William Logan on  
23 behalf of Micron.

24 Micron respectfully asks that the Court construe the  
25 term 'converter circuit' to be a means-plus-function

1 limitation and find the corresponding structure in the '918  
2 Patent at 29:18 through 64.

3 Your Honor, the parties' two positions are on the slide  
4 that I currently have up. And just to give some context for  
5 the argument that I'm going to present, I'd like to point out  
6 that even in Plaintiff's proposed construction for this term  
7 where it explains what the plain and ordinary meaning may be,  
8 it explains it in functional terms--'a circuit for'. It  
9 essentially uses 'for' instead of 'configured to', which is  
10 how the claim language presents itself, as we'll see shortly.

11 And Your Honor, that really in some ways encapsulates the  
12 difference between the parties on this term, and the key  
13 difference is, is that Micron is focusing on the term  
14 'converter circuit' within the context of the claim.  
15 Conversely, Netlist consistently argues about the term  
16 'circuit' by itself, and essentially Netlist's argument  
17 throughout the briefing is the Federal Circuit has  
18 consistently said that 'circuit' connotes structure;  
19 therefore, paragraph 6 doesn't apply. But this simply isn't  
20 what the Federal Circuit has said in the cases that Netlist  
21 cites.

22 And there's three which I'll briefly describe, but it's  
23 important maybe to look first at *Power Integrations*. And I've  
24 put that quote from *Power Integrations* that I think is most  
25 important to the right. It discusses the appropriate inquiry



1 for considering the term 'circuit' when it comes to whether or  
2 not it's a means-plus-function term. And it says that you do  
3 have to look further than just the word 'circuit', because  
4 while 'circuit' may have some structure, that doesn't mean  
5 that it has sufficient structure. And that really boils down  
6 and distills what the dispute is between the parties. Netlist  
7 says 'circuit' gives some structure, that's enough; Micron  
8 says 'circuit' doesn't give sufficient structure. And when  
9 you look within the context of the claims, 'converter circuit'  
10 doesn't have sufficient structure.

11 So, Your Honor, there were three cases that Netlist cited  
12 in support of its proposition that the Federal Circuit has  
13 consistently found 'circuit' to not be subject to paragraph 6.  
14 In each one of those cases, though, the Federal Circuit went  
15 through the means-plus-function analysis to consider the  
16 context of the claims and whether within the context of the  
17 claims 'circuit' had sufficient structure. And in each case  
18 there was a specific reason it found within that context that  
19 'circuit' had sufficient structure.

20 For instance, in *Power Integrations*, Your Honor--and this  
21 may be some ways the most instructive because it is the most  
22 recent case that Netlist had cited--what the court saw was you  
23 had a term that was maybe discussed in the functional  
24 language, a 'circuit' term. You had inputs, you had what the  
25 court described as a straightforward function that was

1 explained in the claim comparing the magnitudes of three  
2 signals, and then you had an output. So, Your Honor, to the  
3 extent there's a black box there, a circuit, you knew what was  
4 going in, you knew what was going out, and from the claim  
5 language you understood what was in the box, what was  
6 happening inside the box.

7 In *Linear Tech*, Your Honor, what the Court found was that  
8 there was expert testimony that explained within the context  
9 of the claim that a person of ordinary skill in the art would  
10 understand a sufficient structure for 'circuit' as it was  
11 presented there. Certainly not an endorsement by the Federal  
12 Circuit that 'circuit' by itself gives sufficient structure.

13 And then, likewise, Your Honor, in *Apex*, the Court  
14 weighed evidence and found that the parties promoting the  
15 means-plus-function position simply hadn't put forth enough  
16 evidence to meet its burden. And in that case, very  
17 specifically, all the party promoting had put forth was the  
18 meaning -- was the discussion of that term in various district  
19 courts and descriptions from the specification and the  
20 embodiments.

21 So, Your Honor, *Apex* may sum it up best at the bottom,  
22 which is it's just not necessarily the case that 'circuit'  
23 itself connotes sufficient structure. That proper analysis,  
24 *Power Integrations* put forth, is we have to look at the  
25 context of the claims to see if there is sufficient structure

1       there.

2               THE COURT:   And what about 'converter' makes you  
3       think that it does not connote structure here?

4               MR. LOGAN:   Your Honor, that's an excellent  
5       question, and there are cases, which I'll move forward to the  
6       next slide just to see that, of course, there's often what  
7       they call adjectival qualifications that may be put on a term,  
8       like in this case the converter circuit.   But that alone,  
9       without giving some structure, some insight into that black  
10      box that gives some structure to what the circuit is isn't  
11      necessarily enough.

12              So what we have here, to more directly answer your  
13      question, is the expert testimony of Doctor Stone who explains  
14      that 'converter circuit' isn't a known term of art that would  
15      give a POSITA an understanding -- a sufficient understanding  
16      of what the structure of that circuit is.   And interestingly,  
17      during the testimony of Netlist's own expert during the past  
18      trial, he said that he didn't look for any structural element  
19      for this term beyond the functional requirement that something  
20      reduced the voltage.

21              So the point here, Your Honor, is that we have unrebutted  
22      testimony from a witness that explains that a POSITA has no  
23      understanding of what 'converter circuit' means within the  
24      context of this claim, not sufficiently to understand its  
25      structure.

1           And, importantly, Your Honor, Netlist is unable to  
2           produce any evidence about 'converter circuit' having some  
3           kind of meaning in the art, some kind of structure that would  
4           be known to a POSITA. In fact, as I mentioned before, it  
5           argues this term exclusively on 'circuit'. All of the  
6           definitions it puts forth are definitions of 'circuit', which  
7           we know from the Federal Circuit may have some structure but  
8           may not have sufficient structure for this purpose.

9           And this is evident, Your Honor -- for instance, in  
10          Netlist's slides No. 84, it sets forth all of the definitions  
11          that it wants to offer to the Court. Every one of them is  
12          about the term 'circuit'. Likewise, it tries to use Doctor  
13          Stone's testimony on slide 86 of its presentation because  
14          there he's talking about what 'circuit' means.

15          So, Your Honor, to go back to your question, the reason  
16          that Netlist believes 'converter circuit' doesn't provide  
17          sufficient structure is because the evidence in the record is  
18          a POSITA wouldn't have an understanding from that term of what  
19          the structure is, Netlist hasn't offered any evidence that a  
20          POSITA would understand a sufficient structure for that term,  
21          and where Netlist does point to structure for that term, it  
22          points to the specification in the exact passage that Micron  
23          suggests the Court should use to find structure for this term.

24                 THE COURT: Well, what is there about 'converter'  
25          that would cause the 'circuit' term to be less an indication

1 of structure than it ordinarily is? I mean, the -- frankly,  
2 in the cases that you've been citing, the descriptor of  
3 'circuit' was normally something not well-known. *Power*  
4 *Integrations*, I think it was a soft start circuit.

5 MR. LOGAN: Yes, Your Honor.

6 THE COURT: 'Converter' is, within the electrical  
7 arts, a much better understood structure and concept.

8 MR. LOGAN: Your Honor, I believe the distinguishing  
9 factor there, and *Power Integrations* is a wonderful example,  
10 is that the claim language itself lended some structure, in  
11 other words, some understanding of what was happening inside  
12 the box, and there it was a straightforward comparison. The  
13 claim language explains you're comparing the magnitude of  
14 three signals. That's what the circuit was doing. That's  
15 a structure that a POSITA would understand from it what's  
16 happening in the box.

17 The problem with 'converter circuit' is that there's no  
18 indication in the claim language of what's inside the box of a  
19 converter circuit. It's not a known term to a POSITA. It  
20 gives the POSITA no guidance on the structure that's necessary  
21 to carry out the means. So the natural thing for a POSITA to  
22 do is to turn to the specification to understand the structure  
23 that fulfills that means.

24 THE COURT: What else would a converter be in this  
25 context than something that would convert the voltage?

1 MR. LOGAN: Your Honor, that's a -- it's an  
2 excellent question, because that's exactly what it does.  
3 And that's why means-plus-function claiming can be so helpful,  
4 because we do know from the term and the surrounding context  
5 what the output is. So there's no doubt here that the  
6 term 'converter' helps inform the POSITA of this is what we  
7 want to accomplish. The question is does it inform a POSITA  
8 of how do we go about accomplishing that; what's the  
9 structure, what's the manner in which we're going to go about  
10 carrying that function out, producing that means that we're  
11 having.

12 So while 'converter' certainly helps the Court, a POSITA,  
13 someone reading the claims understand the goal, the outcome.  
14 What it doesn't do, as Doctor Stone points out, is give the  
15 POSITA any insight, any sufficient structure for performing  
16 that conversion function.

17 THE COURT: You know, I think the law is clear that  
18 the term doesn't have to indicate which of a broad class of  
19 structures is called for in the claim, as long as that class  
20 of structures is well-known.

21 MR. LOGAN: Your Honor, that is correct. And  
22 certainly in this case Micron's argument isn't that 'converter  
23 circuit' is broad; Micron's argument in this case is that  
24 'converter circuit' is just an unknown term to a POSITA. It  
25 may inform a POSITA about what the output of the circuit needs

1 to be, but it doesn't inform a POSITA as to what the class, as  
2 Your Honor pointed out, of circuits that might qualify as a  
3 converter circuit are. That's the testimony in the record.

4 And, Your Honor, if you go back, then, and you look in  
5 the specification, there is a fairly detailed description  
6 about the class of structures that qualify as a converter  
7 circuit within this claim language. So it is important to  
8 note that Micron isn't arguing this term's indefinite; Micron  
9 is simply arguing that the drafter chose to use a nonce term,  
10 'converter circuit', a term that's not known in the art,  
11 doesn't have sufficient structure in the art for a POSITA  
12 reading it in the abstract to know the precise class of  
13 structure that are being discussed, but the drafter did put in  
14 the specification a description of the class of structures  
15 that met that term.

16 So, therefore, Your Honor, that is why Micron is setting  
17 forth that this is a means-plus-function term, and to inform  
18 the POSITA of what it means requires looking at the structure  
19 in the specification.

20 THE COURT: What is your best case for the  
21 proposition that 'circuit' is a nonce term?

22 MR. LOGAN: Your Honor, actually the best case for  
23 that is likely all three--*Power Integrations*, *Linear*  
24 *Technology*, and *Apex*. And the reason I say that, Your Honor,  
25 is if any of those cases had stood for the proposition that

1 'circuit' is not a nonce term, 'circuit' itself provides  
2 sufficient structure, the analysis ends there. Instead, in  
3 all of those occasions the Federal Circuit went through the  
4 process of looking at the context of the language, looking --  
5 reading in light of the specification, weighing expert  
6 testimony, and weighing whether the, you know, preponderance  
7 of the evidence standard had been met. So in none of these  
8 cases has the Federal Circuit taken the position that  
9 'circuit' by itself is enough to lend sufficient structure.

10 THE COURT: All right. Thank you, Mr. Logan.

11 MR. LOGAN: Yes, Your Honor.

12 MR. SHEASBY: Jason Sheasby for the Plaintiffs, Your  
13 Honor.

14 Ms. Andrews, may I have the elmo? Thank you.

15 I'm having so much trouble today with this. There we go.

16 The case that they cite, *Power Integrations*, talks about  
17 a descriptions of the circuit's operation may provide  
18 sufficiently definite structure, and the reason *Power*  
19 *Integrations* speaks about that is because 'circuit' is not a  
20 nonce term; 'circuit' is a structure. It's a structure that  
21 exists in electrical engineering. It's not like the module  
22 language that was at issue in some of the other cases that  
23 were described.

24 And if you'll go to the slides now, Ms. Andrews.

25 In this case you start with the claim. So the claim has



1 a structure, a converter circuit. Converter is a structural  
2 feature, it's not a function. There is a separate function  
3 about what that converter circuit does. It provides a fourth  
4 regulated voltage having a fourth voltage amplitude. So you  
5 have to convert an input voltage, and from that input voltage  
6 yield a fourth regulated output voltage; once again, a  
7 specific description of structure.

8 And we know what that converter circuit is connected to.  
9 If we go down to the last element, the -- it's connected to  
10 the SDRAM devices. And so the claim itself provides the  
11 specific detailed description of the structure of the circuit,  
12 what voltage it receives, what voltage it outputs, and the  
13 fact that it converts it and what's it connected to. This  
14 falls squarely into the Federal Circuit precedent that makes  
15 it not a nonce term.

16 Apex, 325 F.3d, 1373. "The term 'circuit' with an  
17 appropriate identifier such as interface, programming, and  
18 logic certainly identifies some structural meaning." There  
19 was some suggestion that this Apex is no longer good law, but,  
20 in fact, in 2022 Apex was cited with favor by Dyfan, 28 F.4d,  
21 1360, 1366, that having some structure is all that's necessary  
22 to remove a claim from § 112.

23 The reason why the converter circuit on its own -- the  
24 reference to the word 'converter' is because the definition of  
25 'circuit' is not a nonce term. So this is a point of some

1 confusion.

2 I think Micron has a two-step burden to satisfy. The  
3 first step burden they have to satisfy is that 'converter  
4 circuit' is a nonce term. Then if they satisfy that it's a  
5 nonce term, then they can go to § 112, ¶ 6, and argue  
6 indefiniteness, and the reason why definitions of 'circuit'  
7 are so important because they establish that 'circuit' is not  
8 a nonce term.

9 I should also point that Doctor Stone has -- if you read  
10 his declaration, he speaks about the fact that 'circuit' is a  
11 nonce term because it could be a combination of hardware -- it  
12 could be software, hardware, or a combination of software and  
13 hardware. There is no description that in the context of this  
14 patent, which is purely about hardware, that 'converter  
15 circuit' is a nonce term. A converter circuit in the claims  
16 of the patent are clearly a hardware structure that receives a  
17 specific voltage and outputs a specific voltage. So I would  
18 take with a jaundiced eye Doctor Stone's general statement  
19 that out of context 'circuitry' could involve software, I that  
20 don't think that has any connection to the specification.

21 I'll also note a point of irony in that after writing a  
22 declaration that says 'circuitry' is not a structural term but  
23 is a nonce term, in paragraph 25 of his declaration he  
24 literally describes 'voltage conversion' as structure, not a  
25 function, which is exactly the structure that is at issue in

1 this case, in this claim.

2 And, of course, under the crucible of cross examination  
3 by Mr. Tezian, he admitted that the definition of 'circuit' is  
4 not a nonce term. This is Exhibit 24 from our opening -- our  
5 reply brief at 23, lines 19 through 17, that it's not a nonce  
6 term. The fact of the specification discusses -- and this is  
7 a relevant passage is 29, lines 18 through 31. It says,  
8 "Converter circuits, such as buck converters, boost  
9 converters, and buck-boost converters." I do think the 'such  
10 as' is relevant. 'Such as' is not a term of limitation; it's  
11 a term of open-endedness because the specification makes clear  
12 that 'converter circuits' are a term that's known in the art.  
13 And, of course, we know that 'converter circuits' are a term  
14 that is in the art. Doctor Stone admitted this, that other  
15 converter circuits, including an LDO converter circuit, which  
16 is what they want to exclude, was known in the art at the time  
17 of the patent. So these are well-known features. This is  
18 Exhibit 24 to our reply at 19:19 through 25. Doctor  
19 Mangione-Smith in his trial testimony also admitted that he  
20 looked for structure, and particularly he looked for a switch.

21 There is also a point that I'll make, which is that there  
22 was a canary in the coal mine that we know that converter  
23 circuit is not a nonce term. We know that because there is  
24 another term which is, if anything, more noncey. I don't know  
25 if 'more noncey' is a word, but I'm going to use

1 it--N-O-N-C-E-Y for Mr. Court reporter; at least that's how I  
2 would spell it. In -- they have this term that's 'first  
3 circuit', and they say 'first circuit' is not a nonce term;  
4 it's a term that should just be construed. But if you look at  
5 the structure -- and they say, Well, the reason for that,  
6 don't worry, Your Honor, is because 'first circuit' has  
7 structure associated to it. And, in particular, 'first  
8 circuit' is coupled to SDRAM devices and to edge connections.  
9 And they say, Because we know where it's coupled to on the  
10 -- in the claim, it's not a nonce term.

11 Well, I can tell you if first circuit is not a nonce term  
12 because it describes where it's connected to in the claim,  
13 there's no conceivable way that 'converter circuit' could be a  
14 nonce term. 'Converter circuit' has even greater detail about  
15 what it's connected to, what it does, what voltage it  
16 receives, and what voltage is output.

17 So I believe that the overwhelming evidence from their  
18 own expert, the specification itself, as well as their  
19 position that 'first circuit' is not a nonce term, does  
20 suggest that this term is not nonce. Once it's not nonce,  
21 the § 112 ¶ 6 argument drops away.

22 Thank you very much, Your Honor. I'll stand down, unless  
23 Your Honor has questions.

24 THE COURT: All right. Thank you, Mr. Sheasby.

25 MR. LOGAN: Thank you, Your Honor.

1           When opposing counsel discussed the claims, he said that  
2   'converter circuit' was -- had sufficient structure because  
3   the claim describes its operation. But in describing the  
4   operation, all that opposing counsel said, Well, here's what  
5   goes in and here's what comes out, and that's not a  
6   description of the operation in the way that's discussed, for  
7   instance, in *Power integrations* where the court looked at--and  
8   this is discussing *Abacus*--what comes in is their structure  
9   for what happens and then what goes out. And here all we have  
10   is what goes in, what goes out, which is not the operational  
11   point.

12           Opposing counsel also tries to conflate this with the  
13   term 'first circuit', but the term 'first circuit' isn't  
14   claimed in a similar fashion. It doesn't say 'first circuit  
15   configured to'. What we're dealing with in these claims is a  
16   very apparent attempt to use means-plus-function-type  
17   claiming. In fact, Your Honor, one case is *MTD Products* where  
18   the court there said, "The claim language reciting what the  
19   mechanical control circuit was configured to do was  
20   functional. This claim format tends to favor the position  
21   that § 112, ¶ 6 applies."

22           All of the claims that we're dealing with for 'converter  
23   circuit', unlike 'first circuit', are 'configured to' claims,  
24   which raises the specter of paragraph 6.

25           Your Honor, opposing counsel also suggested that *Apex*

1 sets the standard and that some structure is enough, but, of  
2 course, this does not comport with the statement in *Apex* that  
3 their finding was based on not finding sufficient evidence to  
4 overcome the presumption, and the statement in the much later  
5 *Power Integrations* that the question is whether an ordinary  
6 skilled artisan finds sufficiently definite structure. So the  
7 standard certainly does not appear to be from any of these  
8 cases whether some structure exists.

9 THE COURT: You know, 'sufficiently definite  
10 structure' does not mean that we're supposed to -- the court  
11 is supposed to determine in claim construction whether that  
12 structure can accomplish the requirements of the claim; it's  
13 just a determination as to whether it is sufficiently  
14 structure as opposed to pure function.

15 MR. LOGAN: That is correct, Your Honor. But the  
16 point would be from *Micron* to not move the goal post to say  
17 that as long as 'circuit' provides some structure, that's  
18 enough to avoid setting forth or taking part in this analysis  
19 at all, because whether or not 'circuit' provides some  
20 structure doesn't inform whether 'converter circuit' provides  
21 sufficient structure in this case.

22 THE COURT: All right.

23 MR. LOGAN: Another point is that when discussing  
24 the paragraph that sets forth -- it's on slide 89 of Netlist's  
25 presentation. When discussing the paragraph that does set

1     forth the structure for 'converter circuit' in the  
2     specification, they focused in on some 'such as' language.  
3     Notably, Netlist is the one that has cited directly to that  
4     sentence in describing the structure. Micron's position is  
5     the much larger passage that gives more context to the  
6     structure and does not try to limit it to the specific  
7     examples set forth just in the 'such as' clause.

8             Unless there are any further questions, Your Honor,  
9     that's all.

10            THE COURT: No. Thank you, Mr. Logan.

11            MR. LOGAN: Thank you, Your Honor. I appreciate it.

12            THE COURT: I know that we have a discovery motion  
13     that has been set for argument today. If that completes the  
14     claim construction issues, we'll take a break now, come back,  
15     and take up the discovery motion. So --

16            MR. SHEASBY: Yes, Your Honor, it does complete the  
17     claim construction.

18            THE COURT: All right. And we'll take a 15-minute  
19     recess. Thank you.

20                                 (End of hearing.)

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